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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,738	03/16/2004	Kimikazu Matsumoto	089367-0125	1166

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EXAMINER	
KIM, RICHARD H	

ART UNIT	PAPER NUMBER
2871	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/800,738	MATSUMOTO, KIMIKAZU	
	Examiner	Art Unit	
	Richard H. Kim	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/19/04*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/26/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (AAPA) in view of Cha et al. (US 6,486,933 B1) and Choi et al. (US 6,429,918 B1).

Referring to claims 1, 5 and 6, AAPA discloses a device and method comprising a pair of substrate (Fig. 17, ref. 200, 100); a liquid crystal sealed between the pair of substrates (300); a plurality of data lines and a plurality of scanning lines which are arranged so as to intersect each other on one surface of a first of the pair of substrates (Fig. 16, ref. 102, 106), a switching element having an electric current path, one end of which is connected to a corresponding one of the data lines, and having a control terminal which is connected to a corresponding one of the scanning lines (Fig. 16, res. 105), and having a control terminal which is connected to a corresponding one of the scanning lines (specs, page 3, lines 11-18); a pixel electrode which is provided above the data lines via an insulation film (112), and is connected to the other end of the electric current path of the switching element (Fig. 16, ref. 112); a common electrode which opposes that data line via the insulation film (111); a black matrix which is arranged on a second of the pair of substrates in a predetermined manner (202), the black matrix being covered by a flattening film (204). However, the reference does not disclose that the common electrode has

slits in portions overlapping the data line, wherein at least some portions of the common electrode that are adjacent to the slits overlap at least some portions of the data lines.

Cha et al. discloses a common electrode having slits in portions overlapping the data lines, wherein at least some portions of the common electrode that are adjacent to the slits overlap at least some portions of the data lines (Fig. 7, ref. 320, 700).

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the common electrode to have slits in portions overlapping the data lines, wherein at least some portions of the common electrode that are adjacent to the slits overlap at least some portions of the data lines since one would be motivated to "prevent the generation of abnormal electric field due to the potential difference between the data line and the pixel electrode" (col. 6, lines 30-33).

Furthermore, AAPA does disclose a first conductive film provided on the flattening film so as to oppose the data lines via the slits, the first conductive film being set to a common electric potential with the common electrode, wherein the first conductive film overlaps the portions of the common electrode where the slits are formed, wherein first conductive film overlaps at least portions of the black matrix, wherein an electric field can be generated between the common electrode and the pixel electrode, wherein the first conductive film is formed in a pattern that is the same as the black matrix.

Choi et al. discloses a first conductive film provided on a flattening film so as to oppose the data lines (Fig. 3, ref. 37), the first conductive film being set to a common electric potential with the common electrode (col. 5, lines 1-4), wherein the first conductive film overlaps the portions of the common electrode (16a, 37), the first conductive film overlaps at least portions of

the black matrix (Fig. 3, ref. 37), wherein an electric field can be generated between the common electrode and the pixel electrode (col. 5, lines 14-16), wherein the first conductive film is formed in a pattern that is the same as the black matrix (Fig. 3, ref. 37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a first conductive film provided on the flattening film so as to oppose the data lines via the slits, the first conductive film being set to a common electric potential with the common electrode, wherein the first conductive film overlaps the portions of the common electrode where the slits are formed, wherein first conductive film overlaps at least portions of the black matrix, wherein an electric field can be generated between the common electrode and the pixel electrode and wherein the first conductive film is formed in a pattern that is the same as the black matrix since one would be motivated to prevent light leakage (col. 2, lines 13-18).

3. Claims 2-4 and 7-8 rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Choi et al., in view of Lin et al. (6,757,031 B2).

Referring to claims 2-4 and 7-8, AAPA and Choi et al. disclose the device and method previously recited. Choi et al. further discloses that the first conductive film has a pattern that is almost the same as that of the black matrix (37, 33), wherein the first conductive film is made of a transparent metal layer or an opaque metal layer (col. 4, lines 65-66). However, the reference does not disclose that the first conductive film is made of ITO or is made of a material having a low resistance.

Lin et al. discloses a device wherein a conductive film is made of ITO or is made of a material having a low resistance (col. 4, lines 45-46).

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the conductive film to be made of ITO or is made of a material having a low resistance since one would be motivated to reduce power consumption.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H. Kim whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard H Kim
Examiner
Art Unit 2871

RHK

ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800